

PATENT Customer No. 22,852 Attorney Docket No. 9140.0014-00

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	)
DEMARAY, Richard E. et al.	) Group Art Unit: 1731
Application No.: 09/903,081	) Examiner: HOFFMAN, John M.
Filed: July 10, 2001	) Confirmation No.: 1225
For: AS-DEPOSITED PLANAR OPTICAL WAVEGUIDES WITH LOW SCATTERING LOSS AND METHODS FOR THEIR MANUFACTURE	) ) ) )

## MAIL STOP AMENDMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

## FOURTH SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. § 1.97(c)

Pursuant to 37 C.F.R. §§ 1.56 and 1.97(c), Applicants bring to the attention of the Examiner the documents on the attached listing. This Information Disclosure Statement is being filed after the events recited in Section 1.97(b) but, to the undersigned's knowledge, before the mailing date of either a Final action, Quayle action, or a Notice of Allowance. Under the provisions of 37 C.F.R. § 1.97(c), the Commissioner is hereby authorized to charge the fee of \$180.00 as specified by Section 1.17(p) to Deposit Account No. 06-0916.

Copies of the listed foreign and non-patent literature documents are attached. Copies of the U.S. patents and patent publications are not enclosed.

Applicants respectfully request that the Examiner consider the listed documents and

indicate that they were considered by making appropriate notations on the attached form.

This submission does not represent that a search has been made or that no better art exists

and does not constitute an admission that each or all of the listed documents are material or

constitute "prior art." If the Examiner applies any of the documents as prior art against any claim

in the application and Applicants determine that the cited documents do not constitute "prior art"

under United States law, Applicants reserve the right to present to the office the relevant facts

and law regarding the appropriate status of such documents.

Applicants further reserve the right to take appropriate action to establish the patentability

of the disclosed invention over the listed documents, should one or more of the documents be

applied against the claims of the present application.

If there is any fee due in connection with the filing of this Statement, please charge the

fee to our Deposit Account No. 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,

GARRETT & DUMNER, L.L.P.

Dated: February 27, 2006

Oy. / Cary I Fdy

Reg. No. 41,008

EXPRESS MAIL LABEL NO. EV 746094856 US

-2-

		(0) P	= 40		
IDS Form PTO/SI	3/08: Substitute for form 1	449A/PTO	/ <b>3</b>		Complete if Known
		CER	2 8 500e E	Application Number Filing Date First Named Inventor Art Unit Examiner Name	09/903,081
INE	ORMATION I	บริไว เรีย	IRE Æ	Filing Date	July 10, 2001
OT.	OKWALION I	ADDETCA	NT 4	First Named Inventor	DEMARAY, Richard E.
) 51A	IEMENI BY	APPE	RADELIS	Art Unit	1731
	(Use as many sheets	as necessary)		Examiner Name	HOFFMAN, John M.
Sheet	1	of	3	Attorney Docket Number	9140.0014-00

Examiner Initials*	Cite No.1	Document Number	Issue or Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant
		Number-Kind Code <sup>2</sup> (if known)	MM-DD-YYYY		Figures Appear
		US-3,309,302	03-14-1967	Heil	
		US-5,338,625	08-16-1994	Bates et al.	
		US-5,561,004	10-01-1996	Bates et al.	
		US-5,930,046	07-27-1999	Solberg et al.	
		US-6,242,129 B1	06-05-2001	Johnson	
		US-6,280,875 B1	08-28-2001	Kwak et al.	
		US-6,376,027 B1	04-23-2002	Lee et al.	
		US-6,632,563 B1	10-14-2003	Krasnov et al.	
		US-6,683,244 B2	01-27-2004	Fujimori et al.	
		US 2002/0001746 A1	01-03-2002	Jenson	
		US 2002/0076133 A1	06-20-2002	Li et al.	
-		US 2002/0140103 A1	10-03-2002	Kloster et al.	
		US 2003/0178637 A1	09-25-2003	Chen et al.	

Note: Submission of copies of U.S. Patents and published U.S. Patent Applications is not required.

	FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document  Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	Translation <sup>6</sup>
		WO 2004/106581 A2	12-09-2004	Symmorphix, Inc.		
		WO 2004/106582 A2	12-09-2004	Symmorphix, Inc.		

	NON PATENT LITERATURE DOCUMENTS				
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	Translation <sup>6</sup>		
		KIM, H-K. and YOON, Y., "Characteristics of rapid-thermal-annealed LiCoO <sub>2</sub> cathode film for an all-solid-state thin film microbattery," J. Vac. Sci. Technol. A 22(4):1182-1187 (2004).			
		Response to Office Action filed on October 17, 2005 in U.S. Application No. 10/291,179 (Attorney Docket No. 09140.0001-00).			

Examiner	Date	
Signature	Considered	

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

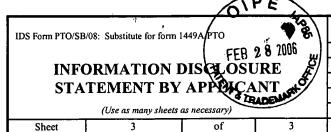
		614	1 4
IDS Form PTO/SB	/08: Substitute for form	1449 /PTO FEB 2	\$ 2006 B
INFO	DRMATION 1	DIS <mark>G</mark> LOSI	JRE 🎉
STA	TEMENT BY	APPLACA	NT
	(Use as many sheets	as necessary)	
Sheet	2	of	3

Complete if Known			
Application Number	09/903,081		
Filing Date	July 10, 2001		
First Named Inventor	DEMARAY, Richard E.		
Art Unit	1731		
Examiner Name	HOFFMAN, John M.		
Attorney Docket Number	9140.0014-00		

 NON PATENT LITERATURE DOCUMENTS	
Final Office Action issued on December 14, 2005 in U.S. Application No. 10/291,179 (Attorney Docket No. 09140.0001-00).	
PCT Invitation to Pay Additional Fees for PCT/US01/22750, dated March 13, 2002 (Attorney Docket No. 09140.0002-00304).	
PCT International Search Report for PCT/US01/22750, dated July 19, 2002 (Attorney Docket No. 09140.0002-00304).	
 PCT Written Opinion for PCT/US01/22750, dated July 23, 2002 (Attorney Docket No. 09140.0002-00304).	
PCT International Preliminary Examination Report for PCT/US01/22750, dated October 8, 2002 (Attorney Docket No. 09140.0002-00304).	
Office Action issued September 21, 2005 in U.S. Application No. 11/100,856 (Attorney Docket No. 09140.0015-01).	
Response to Office Action filed December 5, 2005, in U.S. Application No. 10/101,863 (Attorney Docket No. 09140.0016-00).	
Final Office Action issued on February 14, 2006, in U.S. Application No. 10/101,863 (Attorney Docket No. 09140.0016-00).	
Response to Office Action filed February 24, 2006, in U.S. Application No. 10/101,863 (Attorney Docket No. 09140.0016-00).	
Response to Office Action filed on July 25, 2005 in Application No. 10/954,182 (Attorney Docket No. 09140.0016-01).	
Office Action issued on October 25, 2005, in U.S. Appl. No. 10/954,182 (Attorney Docket No. 09140-0016-01000).	
Response to Office Action filed on December 21, 2005 in Application No. 10/954,182 (Attorney Docket No. 09140.0016-01).	
Response to Office Action filed on November 8, 2005, in U.S. Application No. 10/101,341 (Attorney Docket No. 09140-0017-00).	
Office Action issued on February 13, 2006, in U.S. Application No. 10/101,341 (Attorney Docket No. 09140-0017-00).	
Office Action issued on October 3, 2005 in U.S. Application No. 10/650,461 (Attorney Docket No. 09140-0025-00).	
Response to Office Action filed on January 3, 2006 in U.S. Application No. 10/650,461 (Attorney Docket No. 09140-0025-00).	
International Preliminary Examination Report mailed April 15, 2004 in PCT/US03/24809 (Attorney Docket No. 09140-0025-00304).	
Office Action issued on December 2, 2005 in U.S. Application No. 10/789,953 (Attorney Docket No. 09140.0030-00).	

Examiner	Date	
Signature	Considered	<u> </u>

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



Complete if Known			
Application Number	09/903,081		
Filing Date	July 10, 2001		
First Named Inventor	DEMARAY, Richard E.		
Art Unit	1731		
Examiner Name	HOFFMAN, John M.		
Attorney Docket Number	9140.0014-00		

 NON PATENT LITERATURE DOCUMENTS	
Specification and Preliminary Amendment as filed for U.S. Appl. No. 11/297,057 (Attorney Docket No. 09140.0030-01).	
Office Action issued on March 24, 2005 in U.S. Application No. 10/851,542 (Attorney Docket No. 09140.0033-00).	
Response to Office Action dated July 25, 2005 in U.S. Application No. 10/851,542 (Attorney Docket No. 09140-0033-00).	
Office Action issued on October 19, 2005 in U.S. Application No. 10/851,542 (Attorney Docket No. 09140.0033-00).	
Response to Office Action filed January 19, 2006 in U.S. Application No. 10/851,542 (Attorney Docket No. 09140.0033-00).	
PCT International Search Report and Written Opinion for Application No. PCT/US2004/014524 dated March 2, 2005 (Attorney Docket No. 09140.0033-00304).	
PCT International Preliminary Report on Patentability for Application No. PCT/US2004/014524, dated December 8, 2005 (Attorney Docket No. 09140.0033-00304).	
PCT International Search Report for Application No. PCT/US2004/014523 dated January 17, 2005 (Attorney Docket No. 09140.0034-00304).	
PCT Written Opinion for Application No. PCT/US2004/014523 dated January 17, 2005 (Attorney Docket No. 09140.0034-00304).	
PCT International Preliminary Report on Patentability for Application No. PCT/US2004/014523, dated December 8, 2005 (Attorney Docket No. 09140.0034-00304).	
Specification as filed for U.S. Appl. No. 11/297,057 (Attorney Docket No. 09140.0042-00).	

Examiner	Date	
Signature	Considered	
_		

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

		01	PE		
IDS Form PTO/S	SB/08: Substitute for for	m 1449A/PTO		C	omplete if Known
		FED	2 8 2006	Application Number	09/903,081
INF	ORMATION D	us densu	RF 🐉	Filing Date	July 10, 2001
CT/	ATEMENT DV	ADDISCA	NIT 6	First Named Inventor	DEMARAY, Richard E.
317	AIEWIENI DI	APPLIE	AD THE STATE OF TH	Art Unit	1731
•	ORMATION DATEMENT BY (Use as many sheets	as necessary)	The second secon	Examiner Name	HOFFMAN, John M.
Sheet	1	of	2	Attorney Docket Number	9140.0014-00

U.S. PATENTS AND PUBLISHED U.S. PATENT APPLICATIONS					
Examiner		Document Number	Issue or Name of Patentee or	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
Initials*		Number-Kind Code <sup>2</sup> (if known) Publication Date MM-DD-YYYY	Applicant of Cited Document		
			1		
			<del> </del>		

Note: Submission of copies of U.S. Patents and published U.S. Patent Applications is not required.

	FOREIGN PATENT DOCUMENTS							
Examiner Cite Initials No. 1		Foreign Patent Document  Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	Translation <sup>6</sup>		
		JP 07-233469 A	09-05-1995	Asahi Glass Co., Ltd.		Abstract		

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	Translation <sup>6</sup>
·		DuPont Teijin Films, Mylar 200 SBL 300, Product Information, 4 pages (2000).	
		GOOSSENS, A. et al., "Sensitization of TiO <sub>2</sub> with p-type semiconductor polymers," <i>Chem. Phys. Lett.</i> 287:148 (1998).	
		HAYAKAWA, T. et al., "Enhanced fluorescence from Eu <sup>3+</sup> owing to surface plasma oscillation of silver particles in glass," <i>J. Non-Crystalline Solids</i> 259:16-22 (1999).	
		JANSSEN, R. et al. "Photoinduced electron transfer from conjugated polymers onto nanocrystalline TiO <sub>2</sub> ," Synthet. Metal., 1 page (1999).	
		JONSSON L.B. et al. "Frequency response in pulsed DC reactive sputtering processes," <i>Thin Solid Films 365:</i> 43-48 (2000).	
		KATO, K. and TOHMORI, Y., "PLC Hybrid Integration Technology and Its Application to Photonic Components," <i>IEEE J. Selected Topics in Quantum Electronics</i> 6(1):4-13 (2000).	
		KIM, J-Y. et al. "Frequency-dependent pulsed direct current magnetron sputtering of titanium oxide films," J. Vac. Sci. Technol. A 19(2):429-434 (2001).	
		KIM, D-W. et al. "Mixture Behavior and Microwave Dielectric Properties in the Low-fired TiO <sub>2</sub> -CuO System," <i>Jpn. J. Appl. Phys.</i> 39:2696-2700 (2000).	

Examiner	Date	
Signature	Considered	

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

		/0	IPE			
IDS Form PTO/SB/08: Substitute for form 1449APTO			1808	Complete if Known		
		FE	3 2 8 7006	Application Number	09/903,081	
l INF	ORMATION D			Filing Date	July 10, 2001	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				First Named Inventor	DEMARAY, Richard E.	
) SIP	VIEWENI DI	APPLICA	NT PADEMARK OF	Art Unit	1731	
	(Use as many sheets	as necessary)		Examiner Name	HOFFMAN, John M.	
Sheet	2	of	2	Attorney Docket Number	9140.0014-00	

NON PATENT LITERATURE DOCUMENTS					
LADOUCEUR, F. and LOVE, J.D., in: <u>Silica-based Buried Channel Waveguides and Devices</u> , Chapman & Hall, London, pp. 98-99 (1996).					
LAMB, W.B., "Designing Nonfoil Containing Skins for VIP Applications," DuPont VIA Symposium Presentation, 35 pages (1999).					
PADMINI, P. et al. "Realization of High Tunability Barium Strontium Titanate Thin Films by rf Magnetron Sputtering," <i>Appl. Phys. Lett.</i> 75(20):3186-3188 (1999).					
SUGIYAMA, A. et al., "Gas Permeation Through the Pinholes of Plastic Film Laminated with Aluminium Foil," <i>Vuoto XXVIII</i> (1-2):51-54 (1999).					
TREICHEL, O. and KIRCHHOFF, V., "The influence of pulsed magnetron sputtering on topography and crystallinity of TiO <sub>2</sub> films on glass," <i>Surface and Coatings Technology</i> 123:268-272 (2000).					
VON ROTTKAY, K. et al., "Influence of stoichiometry on electrochromic cerium-titanium oxide compounds," Presented at the 11th Int'l. Conference of Solid State Ionics, Honolulu, Hawaii, November 19, 1997, Published in Solid State Ionics 113-115:425-430. (1998).					

Examiner	Date	
Signature	Considered	

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.